

CLAIMS

I claim:

1 1. An extension for releasing pressurized contents of a
2 canister, comprising:

3 a main body having an outer peripheral surface, a top end,
4 a bottom end, and an aperture formed in said top end, said
5 bottom end having an opening adapted for mounting said main body
6 onto the canister;

7 a depressible actuator tab disposed across the aperture and
8 hingedly secured to said main body, said actuator tab having a
9 valve stem receiving orifice for receiving a valve stem disposed
10 on the canister when said extension is mounted onto the
11 container and a discharge channel in fluid communication with
12 the valve stem for delivering the pressurized contents of the
13 container through said extension;

14 a threaded projection extending outward from the outer
15 peripheral surface of said main body, the projection having a
16 discharge orifice disposed along the end of the projection, said
17 threaded projection being adapted to receive a threaded
18 connector from a conventional discharge hose; and

19 an actuator hinge for securing said actuator tab to said
20 main body, said actuator hinge allowing said actuator tab to

21 move freely from an unactuated position to a depressed actuated
22 position;

23 whereby said actuator tab, when depressed, is adapted for
24 contacting the valve stem of the canister to release the
25 pressurized contents of the canister, the contents being
26 delivered through the discharge channel and out of the discharge
27 orifice on said projection.

1 2. The extension for releasing the pressurized contents of
2 a canister according to claim 1, further comprising an actuator
3 cap lid secured to said actuator cap.

1 3. The extension for releasing the pressurized contents of
2 a canister according to claim 2, further comprising a hinge
3 attaching said actuator cap lid to said actuator cap.

1 4. The extension for releasing the pressurized contents of
2 a canister according to claim 1, further comprising a plurality
3 of finger grooves disposed on a top surface of said actuator tab
for providing a frictional surface.

1 5. The extension for releasing the pressurized contents of
2 a canister according to claim 1, further comprising an
3 integrated locking mechanism for securing said actuator tab in
4 the depressed actuated position, said locking mechanism
5 comprising a lock hook integrally formed in said main body and
6 an engaging hook disposed along a bottom surface of said
7 actuator tab.

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6. A refrigerant canister with an extension for releasing pressurized contents of the canister, comprising:

a housing having a generally cylindrical main body with a top surface, an opening in said top surface and a upstanding rim surrounding said opening;

a housing cover sealably secured to said upstanding rim to seal said opening;

a valve stem disposed through the center of said housing cover having a top portion and a bottom portion, said top portion projecting upward from said housing cover;

an actuator cap having an outer peripheral surface, a top end, a bottom end, and an aperture formed in said top end, said bottom end having an opening adapted for mounting said main body onto said canister;

a depressible actuator tab disposed across said aperture and hingedly secured to said actuator cap, said actuator tab having a valve stem receiving orifice for receiving said valve stem when said extension is mounted onto said canister and a discharge channel in fluid communication with said valve stem for delivering the pressurized contents of said canister through said extension;

22 a threaded projection extending outward from said outer
23 peripheral surface having a discharge orifice disposed along the
24 end of the projection; and

25 an actuator hinge for securing said actuator tab to said
26 main body, said actuator hinge allowing said actuator tab to
27 move freely from an unactuated position to a depressed actuated
28 position;

29 whereby said actuator tab, when depressed, contacts the
30 valve stem of the canister to release the pressurized contents
31 of the canister, the contents being delivered through the
32 discharge channel and out of the discharge orifice on said
33 projection.

1 7. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 6, further comprising a discharge member secured to said
4 threaded projection, wherein said discharge member delivers the
5 contents of said canister to a vehicle air conditioning unit.

1 8. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 7, wherein said discharge member is a refrigerant
4 discharge hose comprising an elongate tubular body having a
5 receiving end, a discharge end, a threaded fitting for engaging
6 said threaded projection disposed on said receiving end, and a
7 disconnect coupler fitting for engaging a vehicle air
8 conditioning unit disposed on said discharge end.

1 9. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 8, wherein said discharge member is integrally formed to said
4 main body.

1 10. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 8, wherein said discharge member is adapted to be removed
4 from said threaded projection.

1 11. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 6, further comprising an actuator cap lid secured to the
4 said actuator cap.

1 12. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 12, wherein said actuator cap lid is secured to said
4 actuator cap by a hinge.

1 13. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 6, further comprising a plurality of finger grooves
4 disposed on a top surface of said actuator tab for providing a
5 frictional surface.

1 14. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 6, further comprising an integrated locking mechanism for
4 securing said actuator tab in the depressed actuated position,
5 said locking mechanism comprising a lock hook integrally formed
6 in said main body and an engaging hook disposed along a bottom
7 surface of said actuator tab.

1 15. A vehicle refrigerant canister with an extension for
2 delivering pressurized contents of the canister to an air
3 conditioning unit of a vehicle, comprising:

4 a housing having a generally cylindrical main body with a
5 top surface, an opening in said top surface and a upstanding rim
6 surrounding said opening;

7 a housing cover sealably secured to said upstanding rim to
8 seal said opening;

9 a valve stem disposed through the center of said housing
10 cover having a top portion and a bottom portion, said top
11 portion projecting upward from said housing cover;

12 an actuator cap having an outer peripheral surface, a top
13 end, a bottom end, and an aperture formed in said top end, said
14 bottom end having an opening adapted for mounting said main body
15 onto said canister;

16 a depressible actuator tab disposed across said aperture
17 and hingedly secured to said actuator cap, said actuator tab
18 having a valve stem receiving orifice for receiving said valve
19 stem when said extension is mounted onto said canister and a
20 discharge channel in fluid communication with said valve stem

21 for delivering the pressurized contents of said canister through
22 said extension;

23 a threaded projection extending outward from said outer
24 peripheral surface having a discharge orifice disposed along the
25 end of the projection;

26 an actuator hinge for securing said actuator tab to said
27 main body, said actuator hinge allowing said actuator tab to
28 move freely from an unactuated position to a depressed actuated
29 position; and

30 a refrigerant charging hose secured to said threaded
31 projection for delivering the released contents of said canister
32 to the air conditioning unit of the vehicle, said charging hose
33 having an engaging end, a discharge end, a threaded fitting
34 disposed on said engaging end for engaging said threaded
35 projection and a disconnect fitting disposed on said discharge
36 end for engaging the air conditioning unit of the vehicle;

37 whereby said actuator tab, when depressed, contacts the
38 valve stem of the container to release the pressurized contents
39 of the container, the contents being delivered through the
40 discharge channel and out of the discharge orifice on said
41 projection into said charging hose to be delivered to the
42 vehicle air conditioning unit.

1 16. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 15, wherein said charging hose is integrally formed to said main
4 body.

1 17. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 15, wherein said charging hose is adapted to be removed
4 from said threaded projection.

1 18. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 15, further comprising an actuator cap lid secured to the
4 said actuator cap.

1 19. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 15, wherein said actuator cap lid is secured to said
4 actuator cap by a hinge.

1 20. The refrigerant canister with an extension for
2 releasing the pressurized contents of the canister according to
3 claim 15, further comprising an integrated locking mechanism for
4 securing said actuator tab in the depressed actuated position,
5 said locking mechanism comprising a lock hook integrally formed
6 in said main body and an engaging hook disposed along a bottom
7 surface of said actuator tab.